

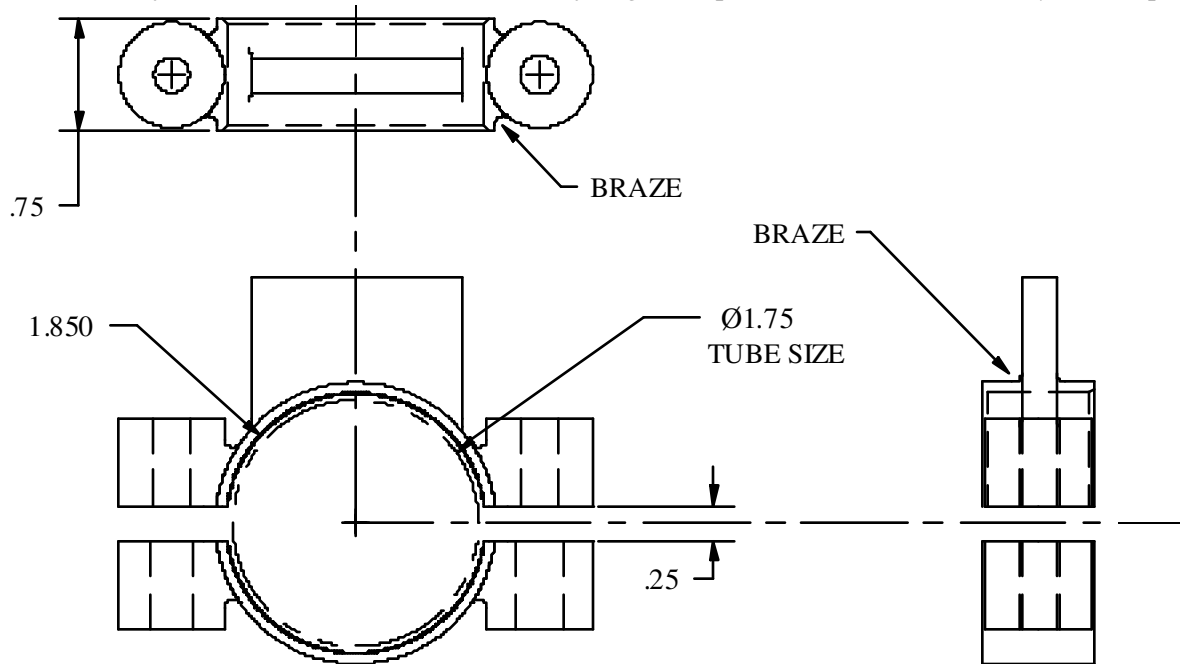
Delivery Boy

A load carrying homebuilt project for the metal worker with skills at the master level

This all steel project revolves around the coaxial wheel first used in the Loveboat. The 50.25 inch wheel base Delivery Boy is intended to be built by an expert metal worker who has access to a machine shop with a milling machine, a lathe with at least a 7/8 collet, a welding or brazing set up and all the necessary clamping and jiggling skills. The bike has a battery power assist option. If the world truly ever embraces efficient energy use, this type of utility bike and its derivatives will be pervasive. Let's start with the rear drop outs and the beginnings of our assembly jig. The jig is built as the bike progresses. Do not attempt the building of this bike without a jig unless your goal is to build a circus bike.

The Dropouts: Braze, Drill/tap, Cut, Clamp and Bore

Two inch diameter by 1/8 wall is the tube size used for the dropout clamp assembly. The rounds are half inch diameter. The piece of quarter inch at the top of the assembly in this drawing is where the stays are attached. Use a moderately high temp (1500° F) brass rod and join the pieces.



The rounds are drilled and tapped for 1/4-20 screws. The bottom half is drilled to .281 and the tapped hole is the top half. Cut the dropouts and mill to the dimensions shown. Be sure to mill the .25 gap and install a shim before clamping the two halves together for the finish bore operation. Hold the 47mm diameter to plus .002" minus .000". If you screw up, reduce the thickness of the shims and bore again. The same shims will be used on the bike to set the clamping pressure on the double row balls. Any kind of steel will suffice. Once they are finished, begin preparation of the all aluminum jig. The first piece of the jig, the DUMMY AXLE to which the dropouts are clamped, acts as a heat sink preventing subsequent brazing operations affecting work already accomplished.